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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,313	08/29/2001	Robert J. Burnham	10541-451	6595
29074	7590	12/14/2004	EXAMINER	
VISTEON C/O BRINKS HOFER GILSON & LIONE PO BOX 10395 CHICAGO, IL 60610			GENACK, MATTHEW W	
			ART UNIT	PAPER NUMBER
			2645	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/941,313	BURNHAM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Matthew W. Genack	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>29 August 2001</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show proper legends. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5-6, 10-11, 15-16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kavenik, U.S. Patent No. 4,313,208.

Regarding claims 1, 6, 11, and 16, Kavenik discloses an audio entertainment and information system for the cabin of a commercial passenger aircraft (Column 7 Lines 16-20, Column 7 Lines 63-65, Fig. 1). There are several lamps, each connected to the aircraft's AC power source, for the purpose of illuminating the cabin's interior (Column 10 Lines 33-40, Fig. 1). Another component of the entertainment system is the radio frequency audio transmitter (Column 7 Lines 40-42, Column 8 Lines 32-54, Fig. 1). There exists an audio source, which provides audio signals to the transmitter, which is adapted to receive these signals and to transmit them throughout the passenger cabin by feeding an appropriate antenna system (Column 8 Lines 12-19, Column 17 Lines 56-60, Fig. 1, Fig. 10). Headsets are provided for the passengers, whereby said headsets are directly connected to equipment with the means for receiving the RF signals, controlling the volume, and selecting the audio channel (Column 7 Lines 23-26, Column 9 Lines 42-62, Fig. 3).

Regarding claims 5, 10, 15, and 20 Kavenik discloses a wired connection between the audio transmitter and the audio source (Column 17 Lines 56-60, Fig. 10).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-3, 7-8, 12-13, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavenik in view of Shamoona et. al., U.S. Patent Application Publication 2003/0034897.

Regarding claims 2, 7, 12, and 17, Kavenik discloses all of the limitations of claims 1, 6, 11, and 16, as outlined above.

Kavenik does not expressly disclose the use of an LED transmitter as the audio transmitter of the audio entertainment system.

Shamoona et. al. discloses the use of an LED transmitter in conjunction with an entertainment center (0043 Lines 1-6, Fig. 5).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use one or more LED transmitters of Shamoona et. al. in the audio entertainment system of Kavenik.

One of ordinary skill in the art would have been motivated to make this modification because radiation from an LED transmitter would not leave the aircraft and interfere with devices outside of said aircraft.

Regarding claims 3, 8, 13, and 18, Kavenik discloses all of the limitations of claims 1, 6, 11, and 16, as outlined above.

Kavenik does not expressly disclose the use of an infrared transmitter as the audio transmitter of the audio entertainment system.

Shamoon et. al. discloses the use of an infrared transmitter in conjunction with an entertainment center (0038, Fig. 4).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use one or more infrared transmitters Shamoon et. al. in the audio entertainment system of Kavenik.

One of ordinary skill in the art would have been motivated to make this modification because radiation from an infrared transmitter would not leave the aircraft and interfere with devices outside of said aircraft.

6. Claims 4, 9, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavenik in view of Claesson et. al., U.S Patent Application Publication 2002/0075965.

Kavenik discloses all of the limitations of claims 1, 6, 11, and 16, as outlined above.

Kavenik does not expressly disclose the use of digital signals in the audio entertainment system.

Claesson et. al. discloses the use of digital audio broadcasting, whereby an analog audio signal is passed through an A/D converter at the broadcasting station (0093, Figs. 12a-12b).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Kavenik by broadcasting digital audio signals within the aircraft cabin, combined with the use of an A/D converter in the audio source as taught by Claesson et. al.

One of ordinary skill in the art would have been motivated to make this modification because of the higher degree of information fidelity inherent in digital broadcasting.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 703-605-4305. The examiner can normally be reached on FLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 703-305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Genack

Examiner

Art Unit 2645



10 December 2004



FAN TSANG  
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